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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,434	05/05/2004	Niall R. Lynam	DON01 P-1152	3433

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EXAMINER

AMARI, ALESSANDRO V

ART UNIT	PAPER NUMBER
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2872

MAIL DATE	DELIVERY MODE
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10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/709,434

Applicant(s)

LYNAM, NIAL R.

Examiner

Alessandro Amari

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 July 2007 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt US 6,030,084 in view of Gillich et al US 6,709,119.

In regard to claim 1, Schmidt teaches (see for example, Figures 2, 3) a wide angle reflective element for a mirror assembly for a vehicle comprising a polymeric mirror substrate (12) having an exterior surface comprising a less curved inboard surface or surface and a more curved outboard surface as shown in Figures 2 and 3, said polymeric mirror substrate comprising a polymeric resin material as described in column 3, lines 39-50, said substrate having a reflector (15) disposed on a surface thereof to provide a reflective element for a vehicle mirror assembly.

Regarding claim 2, Schmidt et al teaches that said reflector is disposed at an inner surface (14) of said substrate opposite said exterior surface as shown in Figure 2.

However, in regard to claim 1, Schmidt does not teach a thin at least partially flexible glass sheet, said thin at least partially flexible glass sheet existing as a pre-formed glass sheet that is separate from said polymeric mirror substrate, said thin at least partially flexible glass sheet having an attaching surface, said attaching surface being opposed to and adhered to said exterior surface of said polymeric mirror substrate when said thin at least partially flexible sheet is adhered to said exterior surface of said polymeric mirror substrate, said thin at least partially flexible sheet providing an anti-abrasion sheet at said outboard and inboard surfaces of said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet conforming to said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm.

In regard to claim 1, Gillich et al teaches (see Figure 1) a thin at least partially flexible glass sheet (101), said thin at least partially flexible glass sheet existing as a pre-formed glass sheet that is separate from said polymeric mirror substrate as described in column 8, lines 28-37, said thin at least partially flexible glass sheet having an attaching surface, said attaching surface being opposed to and adhered to said exterior surface of said polymeric mirror substrate when said thin at least partially flexible sheet is adhered to said exterior surface of said polymeric mirror substrate, said thin at least partially flexible sheet providing an anti-abrasion sheet at said outboard and

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inboard surfaces of said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet conforming to said exterior surface of said polymeric mirror substrate when adhered thereto as described in column 1, lines 56-67, column 2, lines 1-5 and column 8, lines 28-37, said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm having a thickness of less than approximately 0.8 mm as described in column 2, lines 32-39. Although the prior art does not specifically disclose the claimed partially flexible glass sheet, this is seen to be an inherent teaching of the device since glass sheets thinner than 100 μm show bending properties and are therefore flexible. Furthermore, the applicant's specification does not define the term "partially flexible" in any terms of degree, so the reference is taken to read on this feature.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the glass film as taught by Gillich et al in the substrate of Schmidt in order to provide for a protective layer that protects the underlying layers from mechanical damage.

Regarding claims 3 and 4, Schmidt discloses that said substrate is cut from a molded or extruded or cast strip or sheet, said glass sheet being laminated to said strip cut from said strip or sheet, at least two substrates being or sheet as described in column 3, lines 39-65 and regarding claim 4, Schmidt discloses wherein said reflector comprises a reflective film applied to said strip or sheet on an inner surface of said substrates opposite said exterior surface as described in column 3, lines 39-65.

Applicant should note that claims 3 and 4 are product-by-process claims and in product-

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by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production."

In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claim 5, Schmidt teaches (see Figure 2) wherein said reflector comprises a reflective film (15) applied to an inner surface (14) of said substrate opposite said exterior surface as described in column 51-57.

Regarding claim 11, Schmidt discloses that said reflective element is adapted for use as an exterior rearview mirror assembly as described in column 1, lines 15-21.

Regarding claim 8, Schmidt in view of Gillich et al discloses the claimed invention as set forth above except for the rearrangement of the reflective film being applied to the exterior surface of the substrate, said glass film being applied to an exterior surface of the reflective film. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the reflective film to be applied to the exterior surface of the substrate, since it has been held that a mere rearrangement of elements without modification of the operation of the device involves only routine skill in the art. One would have been motivated to rearrange the reflective film to be applied to the exterior surface for the purpose of easier and more efficient manufacturing of the reflective element. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950)

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4. Claims 6, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt US 6,030,084 in view of Gillich et al US 6,709,119 and further in view of Wheatley et al US 5,262,894.

Regarding claims 6, 7, 9 and 10, Schmidt in view of Gillich et al teaches the invention as set forth above but regarding claims 6 and 9, does not teach that said reflective film comprises a polymeric reflective film at least one of laminated, adhered and applied to said inner or exterior surface of said substrate and regarding claims 7 and 10 does not teach that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror.

Regarding claims 6 and 9, Wheatley et al teaches (see Figure 1) that a reflective film is a polymeric reflective film at least one of laminated, adhered and applied to said exterior surface of said substrate and regarding claims 7 and 10 Wheatley et al teaches that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror as shown in Figure 1 and as described in column 6, lines 65-68, column 7, lines 45-68, column 11, lines 61-68 and column 12, lines 1-11.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the polymeric film of Wheatley et al for the reflective element of Schmidt in view of Gillich et al in order to provide for a reflective element which will not corrode or flake.

Response to Arguments

5. Applicant's arguments filed 11 July 2007 have been fully considered but they are not persuasive.

The Applicant argues that the Schmidt-Gillich et al combination does not teach a pre-formed thin flexible glass sheet as disclosed and currently recited. The Applicant further contends that Gillich et al teaches that the protective layer of Gillich et al is a hard coat and is therefore not a thin flexible glass sheet that exists as a pre-formed glass sheet that is separate from a polymeric mirror substrate.

In response to this argument, the Examiner wishes to direct the Applicant's attention to column 6, lines 28-37 of Gillich et al reproduced below which states:

The transparent layers, and here in particular the protective layer, can also be obtained by a flame pyrolytic method. It is also possible to use different processes for the individual layers of a sequence of layers. For example, in the case of rolled products, e.g. foils, strips or sheets, or in the case of laminates containing an aluminum layer, individual coatings or preferably all coatings are applied or deposited in a continuous process, also known as coil-coating.

So, it is apparent that the protective layer can be formed as a pre-existing, pre-formed glass sheet that is separate from the mirror substrate (i.e., rolled products, coil coating) as currently recited in claim 1.

The Applicant further argues that the hard coat of Gillich et al is applied to the body by vacuum, thermal or other vapor deposition methods, and therefore cannot be provided as a pre-formed, pre-existing thin flexible sheet and thus does not have an attaching surface for adhering the pre-formed, pre-existing thin flexible sheet to an exterior surface of a polymeric mirror substrate so as to provide an anti-abrasion sheet

at the outboard and inboard surfaces of the exterior surface of the polymeric mirror substrate.

In response to this argument, the Examiner refers to the discussion above wherein the protective layer can be formed as a pre-existing, pre-formed, glass sheet that is separate from the mirror substrate and would therefore have an attaching surface for adhering the sheet to the surface of the mirror substrate as claimed.

The Applicant further argues that the glass sheet of Gillich et al are not inherently flexible sheets since they are deposited as particles or a coating onto a substrate surface. The Applicant adds that while such a deposited coating may flex with the underlying substrate that gives the coating its form if the coating is deposited on a flexible substrate, it is not inherent that such deposited coatings are flexible sheets.

In response to this argument, the Examiner again refers to the discussion above, which discloses that the protective layer can be a glass sheet separate from the mirror substrate. Since Gillich et al teaches that the protective layer can be formed as a glass sheet which is less than 1000 nm (or .001 mm) and since glass sheets thinner than 100 μm show bending properties, there is sufficient basis in fact to reasonably support the determination that the inherent characteristic (i.e., flexibility of the glass sheet) flows from the teaching of Gillich et al.

The Applicant further argues that deposited coatings described in Gillich et al do not exist as pre-formed glass sheets that are separate from the targeted substrate and are not pre-formed glass sheets with attaching surfaces for adhering to a surface of the targeted substrates as recited in claim 1.


In response to this argument, the Examiner refers to the discussion above wherein the protective layer can be formed as a pre-existing, pre-formed, glass sheet that is separate from the mirror substrate and would therefore have an attaching surface for adhering the sheet to the surfaces of the mirror substrate as claimed.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro Amari whose telephone number is (571)272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ava
11 October 2007


ALESSANDRO AMARI
PRIMARY PATENT EXAMINER